Testimony of Albert Carnesale Chancellor University of California at Los Angeles

Concerning

Promotion of Distance Education Through Digital Technologies

On Behalf of

Association of American Universities American Council on Education National Association of State Universities and Land-Grant Universities

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I am Albert Carnesale, Chancellor of the University of California, Los Angeles. It is my pleasure to welcome you to the UCLA campus today. I hope you will have a little time to tour our beautiful campus, and to sense the enormous intellectual and cultural energy that makes this such a remarkable place. It is particularly appropriate to have this meeting here, since UCLA is where the precursor to the Internet got its start. We are proud that our faculty and former students laid the foundation for what has become such a revolution in communications.

I speak today on behalf of the Association of American Universities, the National Association of State Universities and Land Grant Colleges, and the American Council on Education. In these higher education organizations, the member institutions are represented by their chief executive officers, whose titles are either president or chancellor. UCLA is a member institution, and I represent UCLA in all three organizations. I bring my position at UCLA to your attention in order to emphasize the importance we in higher education place on the issue before you.

In the following remarks, I will address three areas of your inquiry. First, I will describe the role of distance education in the contemporary university and cite some of the ways in which distance education has changed since 1976. Then I will discuss why universities need a special exemption to copyright law's exclusive rights in order to promote distance learning. Finally, I will propose a results-oriented balance of privileges and responsibility

¹ In the mid-60's Professor Leonard Kleinrock of UCLA proposed the ideas behind packet routing and TCP/IP. His graduate students were Robert Kahn and Vinton Cerf, often called the fathers of the Internet. The precursor to the Internet was ARPANet, the first network to use packet routing and TCP/IP, pushed through by Robert Kahn when he went to ARPA after UCLA. The ARPANet got its start as a network linking UCLA, UCSB, the University of Utah, and another institution.

that will ensure that the interests of copyright holders are protected and the needs of institutions, faculty, and students in distance education are met.

Distance Learning in the University

Distance education promises to make the intellectual riches of the University accessible on a much larger scale and for many more purposes than has ever been possible before. Fueled by new technologies that radically enlarge our ability to communicate in many dimensions across space and time, universities are preparing to respond to the needs of students far beyond our traditional residential constituencies. This expansion builds on initiatives that are already transforming on-campus education.

Let me speak just for a moment about the University of California, where hundreds, perhaps thousands, of on-campus courses use online technologies to enhance and complement classroom teaching: students collaborate asynchronously in networked projects, use interactive online modules to complete and submit homework assignments, and access stored material on campus and off to do research and carry out class projects. Graduate seminars now sometimes include participants from research sites around the world, interacting in real time and collaborating asynchronously in data analysis and presentation.

University of California Extension units now offer over 600 distance learning courses, including both online and television classes. Academic departments on the University's nine campuses allow students at other UC campuses to participate in their courses. These offerings include advanced nursing degree programs, specialized law courses, graduate philosophy seminars, advanced political science courses, graduate pharmacy courses, and specialized language and history classes, to name just a few. We transmit hospital grand rounds through videoteleconferencing to medical students and physicians throughout the State. In the next few months, the University will begin to offer advanced placement and enrichment courses to high schools in remote parts of the State that do not have the resources to mount these courses on their own.

Changes Since 1976

As these examples make clear, much has changed in educational practice since the Copyright Act's exemptions for distance education were crafted in 1976. At that time, most distance education fit into one of two models: it exported activities from one enclosed classroom to another via television, or it served unrelated students through correspondence courses in which paper documents were mailed back and forth between teacher and student. Today's classroom is no longer a self-contained space. In-class activity may include networked connections to distant people and material, while interaction among class members frequently takes place in both networked and face-to-face environments. Distance education now encompasses a full spectrum from traditional correspondence courses to courses that combine interactive networked activities with occasional face-to-face meetings.

In 1976, performance and display of works was an exceptional classroom activity, not a daily routine. The majority of class time was spent in speech or, in the case of laboratories, physical collection and manipulation of data. Most performances and displays involved works created and owned by others -- filmstrips, slideshows, movies -and required special equipment to be brought into the classrooms. Today, performance and display of digital works is an integral part of much teaching practice. Teachers create new works specifically for their own classroom use and also show works, such as videotapes, owned by others. For students outside the classroom who access these materials over the Internet, performance or display on a computer screen is a necessity. Much has also changed in the way content is created, stored, and delivered. Interchangeable bits of electronic data make it possible to combine image, sound, motion, text, and numbers in a single work that can be accessed, manipulated, and edited in one process. Digital capabilities make it possible to simulate activities, such as laboratory experiments, that used to require physical presence. Highspeed networks facilitate exchange and sharing of such works and activities across distance and time. In some circumstances, it is easier to share across a network than by hand-to-hand transfer.

Thus, in contrast to 1976, in 1999 we find that:

- (1) it is no longer possible to draw a boundary of mutual exclusion between oncampus and distance learning;
- (2) it is no longer possible to isolate performance and display as a discrete and dispensable part of the teaching and learning process; and
- (3) it makes no sense to handle works used in education differently on the basis of the medium in which they are stored.

The narrow, technology-specific exemption created in 1976 no longer reflects the nature of distance education or the nature of the works used in education in general.

Why We Need An Exemption

Why do universities need a special exemption from the restrictions of copyright law to fulfill the promise of distance education? There are, I believe, three reasons: (1) the ubiquity of networked performance and display in the curriculum; (2) the transaction costs of seeking permission for every performance and display; and (3) the need to protect the privacy of the virtual classroom to promote academic freedom in the networked environment.

Digital technologies, with their associated performance and display, now extend throughout the curriculum and drive much of the expansion of distance education. These developments offer astounding scientific and cultural promise, but to realize that promise, we must be able to use the networked environment to do all the things we have traditionally done in face-to-face gatherings. This means examining material collectively, discussing it, reviewing it, and developing critical analyses. The restrictions on

transmission of dramatic work contained in the existing distance education exemption create a chokepoint that will stifle distance education.

In online distance education, almost every student or teacher action involves performance or display. Although much of what is performed or displayed is the original creation of the teacher or student, significant portions are also owned by others. Many performances and displays mix original material with material owned by others. Students often need to correct and repeat performances and displays because they have made errors in retrieval or analysis.

Education for citizenship in a society dependent on digital resources requires that students learn how to find, examine, analyze, and critique the vast amounts of information contained in digital resources of all kinds. Textbooks and class syllabi are merely starting points for acquiring skills and knowledge that will enable students to navigate an exponentially expanding universe of knowledge. A critical part of their learning is the application of their new knowledge to new material, whether in supervised class exercises or in independent assignments. Students at any location need access to all the different kinds of works in which information is contained, and such access is often achieved by performance and display.

These necessary components of the educational experience will not be feasible in the digital environment if educators must seek separate permission every time they want to perform or display instructional material in a temporary format. Without such an exemption, the transaction costs of seeking permission for every performance or display of works owned by others can impose an intolerable burden on teachers and students. Because of the ubiquity of performance and display, these transactions would require a substantial expansion of the University's non-academic staff.

Performance and display within the context of formal education is fundamentally private, as it takes place before a restricted number of people who must meet specific criteria in order to participate. Educational institutions build community among teachers and students by encouraging them to interact in relationships sustained over weeks or months. Such mechanisms as class enrollment construct boundaries around face-to-face and networked educational relationships. This ensures that members of the learning community meet institutional standards, that they are able to build trust among themselves, and that resources allotted to the class are properly used. This limited privacy must be preserved in the digital environment by permitting unencumbered use of legally acquired materials within class communities.

Licensing may offer reasonable pricing and administrative convenience, and there is every reason for educational institutions to take advantage of it when it is available. But academic freedom cannot survive in an environment in which teachers and students are fully dependent on the choices made by an outside party regarding what material they may use in class. This becomes evident if one considers the use of out-of-print books in education. Today, class material may include out-of-print books borrowed from the library. Some of these may expound controversial or unpopular but historically important

views. In choosing to let the book go out of print, a publisher does not take it out of circulation. If instructional performance and display depends solely on licensing, a copyright holder will have the power to prevent critical examination of any material that he or she does not choose to license.

A Responsible Exemption

The 1976 exemption applies only to activities that take place in classrooms, and it makes hair-splitting distinctions between kinds of material that may be performed, displayed, and transmitted. In many ways, this approach represents a focus on inputs rather than outcomes. I suggest that the traditional classroom provides containment: what is performed or displayed there will not be exported to the world, and only a limited number of students can be seated in the classroom. Thus, copyright owners were reasonably assured that their works would not be widely distributed if legally acquired copies were performed or displayed in classrooms.

It is not unreasonable to seek similar assurances for material made available to students in a networked environment, and I believe that universities are prepared to take appropriate steps in this direction, steps that will apply to education both at a distance and on campus.

Let us look for a moment at essential distinctions:

Digital transmissions can be distinguished in several ways. Content can be stored locally or at a distance: this should not affect legal regulation. Content can be accessed in real time or asynchronously: this should not affect legal regulation. Content can be stored for varying lengths of time: ephemerally, for a real-time transmission; temporarily, for a transmission that can be viewed within a defined period; and permanently, for a transmission that can be viewed indefinitely or downloaded and stored by end users. These differences should be reflected in the rules that apply. Content may be restricted for access under specified conditions or it may be open for access by anyone. These differences, too, are appropriate criteria for different legal treatment.

Instead of limiting the exemption on the bases of distinctions between the location of students and teachers and between categories of work, it is time to think about distinctions based on storage, ability to reproduce and retransmit, and access. Such distinctions should not be technology-specific but should focus on the results to be achieved, so that technological innovation will not make the exemption obsolete.

We believe that works accessed over a network that are reasonably protected from reproduction and redistribution should qualify for an exemption that would allow them to be performed and displayed without specific permission, just as they may be performed and displayed in a physical classroom. To strengthen protections provided by technical means, we are prepared to educate faculty and students about general copyright provisions and to take appropriate steps to prevent misuse of works made available in distance education.

We do not make such pledges only out of responsibility to outside owners. Universities have major interests as both proprietors and users of information. Our teaching and research dissemination missions rely on wise use of our rights as owners of content and our privileges as educational users of content owned by others. When we propose educational exemptions, we expect to grant privileges under those exemptions as well as to enjoy them.

University faculty are prolific authors. Many are seizing on the capabilities of digital technologies to author multimedia works to enhance their teaching both in the traditional classroom and in virtual classrooms with extended hours and places. Universities are also investing targeted resources in partnerships with faculty to produce entire courses or multimedia class materials that will be used well beyond the campus. You may be sure that neither the University nor its faculty wants these works to be distributed in uncontrolled circumstances. However, when we make these works available to others, we will expect them to be performed and displayed in teaching without recurring requests for permission.

In sum, then, universities do not ask for permission for their faculty to reproduce and distribute works belonging to others beyond what is permitted by educational exemptions and fair use. We do, however, assert that for the educational process to take full advantage of the networked environment, an exemption that allows free performance and display of legally acquired material in the course of instruction. This is a necessary precondition for fully realized distance education.